



State of Utah

School and Institutional
TRUST LANDS ADMINISTRATION

MAR 29 2002

Michael O. Leavitt Governor Stephen G. Boyden Director 675 East 500 South, Suite 500 Salt Lake City, Utah 84102-2818 801-538-5100 801-355-0922 (Fax) http://www.trustlands.com

DIVISION OF OIL, GAS AND MINING

March 28, 2002

Mr. Jack Savage, President Oil Tech, Inc. 5615 North 6300 West Morgan, UT 84050

RE:

ML 48592-Oil Shale DOGM #S/047/076

Proposed Rawhide Oil Shale Mine & Retort

Dear Mr. Savage,

On March 22, 2002, you filed notices of intent pursuant to Article XII of mineral lease ML 48592 to conduct oil shale exploration drilling, mining and retorting upon state trust lands. I have submitted the item to the State Resources Development Coordinating Committee (RDCC) and the local area clearinghouse (UBAG) for review and comment. The RDCC review process may take up to 60 days, or longer if additional information is requested. Please do not commence any operations upon the leased lands until you receive written final approval from the Trust Lands Administration.

My own review of your notification raises some questions and concerns requiring further explanation or information. I believe that the notification lacks adequate technical information and support necessary to evaluate the potential impacts of the project upon the property. My specific comments are as follows.

1. Inconsistencies are found between the notices of intent filed with SITLA and DOGM. The SITLA notice of intent describes the project area as impacting Sections 10 and 15, T9S, R25E, while the DOGM notice of intent lists only Section 10. Please clarify whether any operations will occur in Section 15 and amend your notification to DOGM if necessary.

The notice of intent to SITLA describes surface disturbances of 0.20 acre for new road construction,, 3.56 acres for process pad construction and 1.00 acre for a stockpile, for a total surface disturbance of 4.76 acres. The acreage that must surely be disturbed in constructing a mine portal, ventilation shafts and utility road improvements, however, is not given. When one considers these additional areas, I fail to understand how the project can possibly remain under the five-acre limit enabled by the Small Mine notice filed with DOGM. Please explain.

The notification to DOGM references mineral lease #ML 48952, but as we previously discussed the correct SITLA lease number is ML 48592.

- 2. The nature and extent of proposed road construction and improvements is not clear. Please provide a detailed plan for the proposed road work, prepared by a qualified engineer. The plan must describe in detail the location, nature and extent of proposed cuts, fills, berms, grades and culverts. Also, the extent to which the access roads will be paved with asphalt.
- 3. The proposed exploration drill sites must be pre-approved. Please provide a topographic map showing the location of each proposed drill site. Describe the methods to be used in drilling the holes, and also plugging and abandoning the drill holes. Describe how groundwater from the drill holes will be contained on site and how the intersected aquifers will be sealed.
- 4. A detailed plan of the proposed underground mine workings affiliated surface structures is required. Please provide a mine map prepared by a licensed mining engineer or geologist, detailing the proposed underground mine layout, including main entries, room and pillar areas, processing areas and ventilation shafts. Please provide a detailed map of the layout of affiliated surface facilities, including buildings, storage tanks, generators, treatment plants, retorts, topsoil stockpiles, retention ponds, mine portals, ventilation shafts, mine fans and etc. The mine maps must be drawn to scale at not more than fifty feet to the inch and be referenced to public survey monuments or cadastral survey lines and topographic contour lines. Please include a map of projected overburden contours and ore isopach lines over the areas to be mined. Indicate the proposed sequence and timing of mining and ore extraction in all areas of the mine.
- 5. Surface subsidence is a concern for infrastructure and land features. Please submit a map showing the location of any perennial streams, power lines, pipelines or other man made structures over the areas to be mined. Indicate whether any secondary mining will occur and provide a geotechnical analysis, prepared by a qualified engineer, describing probable impacts of surface subsidence upon the surface features listed. The report should also include possible actions to mitigate adverse impacts and damages.
- 6. The Birds Nest aquifer is a major water source in the region and must be protected from contamination. Please contact the Utah Division of Water Rights to determine any special permitting requirements for breaching the Birds Nest aquifer with mine shafts or inclines. Please provide a detailed plan showing where the aquifer may be breached and describing mitigation measure which will be taken to protect the aquifer from contamination by the mining operations. Also, please provide a plan for de-watering the mine and disposing of contaminated mine waters.
- 7. Air quality standards must be maintained in the area of operations. Please obtain an air quality permit or variance for the proposed mining and retorting operations from the Utah Division of Air Quality. Please submit a copy of such permit or variance to this office.
- 8. Please obtain a Small Mine permit for proposed operations disturbing five acres or less and a Large Mine permit for proposed operations disturbing more than five acres, from the Utah Division of Oil, Gas & Mining (DOGM). Please submit a copy of all DOGM filings to the Trust Lands Administration

- 9. Please notify the federal Mine Safety and Health Administration (MSHA) regarding the proposed mining operations and provide a copy of such notification to the Trust Lands Administration.
- 10. Please notify Uintah County and obtain all local permits and licenses required for the proposed mining/retorting operations. Please submit a copy of such notifications to this office, along with a copy of such permits and licenses as may be issued to Oil Tech, Inc. by Uintah County.
- 11. Please notify all other trust lands permittees or lessees having an interest in the effected lands and provide a copy of such notices and responses to the Trust Lands Administration. Also, please determine who owns or maintains the power line access road proposed for improvements and provide this office with a copy of a written agreement between such owner and Oil Tech, Inc. for use, improvement and maintenance of the road.
- 12. Please contact the Bureau of Land Management, Vernal Office, to ascertain the existence or likelihood of any endangered plant or animal species subject to federal law in the vicinity of the proposed mining/retorting operations. Please provide the Trust Lands Administration with a copy of a written assessment or letter of conclusion regarding this matter, signed by the authorized federal officer.
- 13. Please submit a copy of a cultural resources survey covering all areas proposed for surface disturbance. The survey must be performed and written-up by a qualified archeological consultant.
- 14. Please provide a liability insurance policy in the amount of not less than \$1,000,000.00 listing the Utah School and Institutional Trust Lands Board of Trustees and the Utah School and Institutional Trust Lands Administration as co-insured with Oil Tech, Inc.. The policy must insure against all claims of bodily injury, death, or property damage occurring in, on, or about the leased premises in conjunction with the proposed mining and retorting operations.

I look forward to working through the permitting process with Oil, Tech, Inc. to achieve our goal of a functioning, sound and stable oil shale mining and retorting operation upon state trust lands that will generate revenues for the beneficiaries. Please contact me if you any questions.

Sincerely,

John T. Blake

Mineral Resources Specialist